**Path important notes2**

**Lec5:**

**Bladder carcinoma:** 1- transitional “urerhelium” 2-squamous 3-adeno

Most common in old male than female, above 50 yrs

Most important **risk factor**: 1- cigarette 2- Industrial exposure to naphthylamine in aniline dye

**Schistosoma + bladder stone** give squamous type.

**Transitional cell carcinoma:**

* + TCC in situ.
  + Papillary (superficial) TCC carcinoma.
  + Invasive TCC.

**Clinical Manifestations**: Hematuria,

**Investigations**: Cystoscopy

**Grading under** microscope

***TNM staging for bladder carcinoma***

* **T:** is tumor size.
* **N:** lymph node affection by tumor

- N0 no affection.

- N+ lymph nodes infiltration

* **M:** distant metastasis

- M0 no metastasis.

- M+ metastasis.

**Tumor size**:

* **pT 0:** carcinoma in situ.
* **pT I:** the tumor infiltrates the lamina propria.
* **pT II:** the tumor infiltrates the musculosa propria.
* **pT3:** the tumor infiltrates perivesical fat.
* **pT4:** distant spread.

***\* Complications of urinary bladder carcinoma:***

**FBOSS**

**1. Fistula formation**

**2. Bleeding:** hematuria and anemia.

**3. Obstruction:** obstructive uropathy in the form of hydroureter, hydronephrosis

**4. Stone formation:**.

**5. Spread**

**V.important> Treatment:**

I. Superficial non-muscle invasive TCC:

* Requires at least complete endoscopic resection +/- intravesical therapy using Bacillus Calmette-Guérin (BCG) vaccine
* Of good prognosis.

II. Muscle-Invasive TCC:

* Generally radical cystectomy & pelvic lymphadenectomy.
* Of bad prognosis.
  1. Removal of bladder & pelvic LNs.+ Removal of prostate, seminal vesicles, & proximal urethra, males Generally 🡪 impotence.

+ Removal of urethra, uterus, fallopian tubes, ovaries, anterior vaginal wall, & surrounding fascia in females

**Lec6:**

Most **common cause of long standing obstruction uropathy** in male is: BPH.

**Phimosis :** narrowing of the external urethral orifice

***a. Congenital:***  foreskin cannot be fully retracted over the glans penis.

***b. Acquired:*** secondary to inflammatory lesions.

**1ry (metabolic) stones** > no infection

important schedule

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Ca oxalate/phosphate stone | | Uric acid stone | Cysteine stone |
| Etiology | Hypercalcaemia | | Hyperuricemia | Cysteinuria |
| Shape | Rounded | | Rounded | Rounded |
| Consistency | Hard | | Firm | Soft |
| Outer surface | Spiny | | Smooth | Smooth |
| Color | | Brown  ( cus its surface is spiny causing bleeding) | Light brown | Yellow |

Common in**2ry (infected) stone** struvite> stag horn( take shape of pelvis and calyces), come with the infection: pyelonephritis

**Urinary calculi** “stones”:

**Clinical picture**: Severe flank pain: colicky?

* complete, sudden obstruction
* peristaltic movement of urethra

**Ultrasonography** shows:

* Hypdronephrosis \_ dilatation of kidney \_
* uretronephrosis. \_ dilatation of ureter \_

***\* Complications of renal stones:***

MOHIM

**M**igration → pain & obstruction.

**O**bstruction → hydroureter & hydronephrosis or calculus anuria.

**H**ematuria →Injury of urinary mucosa.

**I**nfection → cystitis → pyelonephritis, pyoureter, pyonephrosis.

**M**etaplasia (squamous metaplasia) → squamous cell carcinoma.

For ospe:

\*Case3 and case5 important\*